AMERICAN MUSEUM NOVITATES

Number 1028 — Published by THE AMERICAN MUSEUM OF NATURAL HISTORY New York City — May 29, 1939

SYNOPSIS OF THE AMERICAN SPECIES OF *VOLUCELLA* (SYRPHIDAE; DIPTERA)

By C. H. CURRAN

PART II.—DESCRIPTIONS OF NEW SPECIES

Volucella circe, new species

Rusty reddish or yellowish and greenish, the abdomen with narrow black fasciae. Length, 7 to 9 mm.

MALE.—Face reddish yellow, in fresh specimens greenish, without median vitta, the face and cheeks separated by a narrow ferruginous or brownish line, the cheeks with a small brown spot below the eye in front. Frontal triangle small, shining greenish yellow, black pilose. Vertical triangle reddish brown, with a few black hairs. Occiput mostly black, pale below, cinereous yellow pollinose, the pile yellow; occipital cilia black near the vertex. Cheeks and face yellow pilose, the tubercle with short black hair. Face in profile very short conical below, deeply concave above, perpendicular below the large tubercle. Antennae pale orange; third segment very slightly narrowing to the rounded apex; arista with long black rays and apex. Eyes with moderately long reddish-yellow pile.

Thorax rusty reddish, the broad sides of the mesonotum and the upper half of the pleura paler, more or less greenish yellow. Pile reddish yellow, long, black in front of the scutellum except laterally, and on the scutellum except on the free border. Bristles of the scutellum yellow, the scutellum bearing two or three pairs. The preapical scutellar depression is bordered posteriorly by a black line that is broadened laterally and extends forward and inward around the lateral borders; sub-basally on each side is a small, more or less flattened area that bears only very short pile, but this is not as conspicuous as in some of the other species.

Legs reddish, the tibiae darker, the tarsi blackish beyond the first segment. Coxae and femora yellow pilose, the apices of the femora, and the posterior surface of the front four except basally, with black hair; tibiae and tarsi wholly black-haired.

Wings with yellow tinge, the veins yellow basally, brown on the apical half. Stigma pale luteous. Squamae brown.

Abdomen yellowish or greenish, the base paler; apex of second segment with linear brown fascia, the third with trace of similar band. Pile short, black on the apex of the second and on the whole of the following segments, yellow basally and on the venter, but black on the apical sternite. Genitalia reddish.

FEMALE.—Front greenish yellow, with trace of a narrow reddish, median vitta; gradually widening from the vertex to the antennae, the hair black. No black hairs on the face. Pile of thorax shorter. Femora with very little black hair, the tarsi not or only obscurely reddish basally.

TYPES.—Holotype, male, and allotype, female, Nova Teutonia, Brazil, August 10, 1936 (Fritz Plaumann). Paratypes, two males, same data, and one male, August 15 (Plaumann). The specimens were received from Dr. C. L. Fluke.

Because of the shape of the scutellum this species connects the *vaga* and *tricincta* groups. The marginal cell is open in all but one specimen.

Volucella curiosa, new species

Reddish yellow, the abdomen with black fasciae; disc of thorax sometimes black. Length, 7 to 9 mm.

MALE.—Frontal triangle small, flat, greenish yellow, black pilose. Vertical triangle and occiput blackish, the occiput with grayish pollen; pile yellow, black on the vertical triangle; a few of the occipital cilia black. Cheeks and face yellowish, separated by a narrow brownish stripe, the cheeks with a brown spot in the middle. Face deeply concave above, slightly produced forward below, the tubercle moderately large and prominent. Pile of face and cheeks wholly yellowish. Antennae reddish; arista black on apical half and with long black rays.

Thorax yellowish, the pectus black. The disc of the mesonotum may be black except for a broad, rectangular spot in front of the scutellum, or this area may be ferruginous or black and ferruginous with a pair of lateral stripes very narrowly separated from the large median dark area. Pile yellow, black in the middle in front of the suture and broadly black on the whole width in front of the scutellum. Scutellum ferruginous or rusty reddish, with the entire margin narrowly yellowish; apical depression bordered posteriorly and laterally with black, the

black produced slightly inward in front; the depressed, roughened sub-basal fascia is darkened and somewhat narrowed in the middle so that the base of the scutellum is not prominent in the middle, as in *circe*, new species. Bristles of thorax yellowish.

Coxae and femora reddish; tibiae and tarsi blackish, the basal third of the anterior four tibiae and the basal tarsal segment reddish. Pile black, yellow on the coxae, on the anterior surface of the front femora, on the middle pair except postero-ventrally and apically, and on most of the posterior pair; the posterior femora have black hair apically and on the apical half of the posterior surface.

Wings cinereous hyaline, the veins yellow basally; stigma luteous beyond the brown basal spot. Squamae and fringe brown.

Abdomen rusty reddish with the base greenish yellow, the apices of the segments broadly black, the black continued forward inside the lateral margin of the third segment and along the lateral margins of the fourth to the base; third segment with a pair of subtriangular basal black spots in the middle. Pile black; yellow basally, across the yellow part of the fourth segment and in the middle of the third. Venter yellowish, the last tergite black, the pile yellow. Genitalia mostly reddish.

FEMALE.—Front greenish yellow, gradually widening anteriorly, wholly black pilose, the vertex blackish. Triangles on third abdominal segment extending from base to apex and more or less united; fifth segment mostly black.

TYPES.—Holotype, male, allotype, female, and paratype, male, Nova Teutonia, Brazil, October 10, 15, 1936 (Fritz Plaumann), received from Dr. C. L. Fluke.

Volucella ruralis, new species

Pale greenish or yellowish green; disc of mesonotum dark; bristles of thorax black and yellow; face without median vitta. Length, 10 mm.

MALE.—Face, cheeks, lower occiput and front pale greenish; vertical triangle and occiput blackish, the occiput cinereous pollinose and short yellow pilose, a few short black hairs above, but no long occipital cilia. Front small, very gently convex, the pile of the face, front and cheeks yellowish. Vertical triangle with long black hair. Face and cheeks separated by a brownish stripe, the cheeks with a dark spot in the middle. Face deeply concave above, perpendicular below the large, broad, tubercle, very shortly but acutely conical. Antennae orange; the apical half of the arista and the long rays black.

Mesonotum rusty reddish on the disc, the broad sides greenish; before the scutellum a diffuse, roundish black spot; bristles reddish except on the posterior calli, the hair black. Scutellum greenish, with black hair and bristles, the depression brown on the posterior half; ventral fringe black. Pleura yellowish, the pectus rusty reddish; pile yellow.

Coxae, trochanters, and basal tarsal segment reddish, the femora green, tibiae black. Pile wholly black.

Wings with brown tinge. Squamae and fringe brown. Halteres white.

Abdomen greenish, paler basally; black pilose, the rather narrow base and the three basal sternites with yellow pile. Second segment with a broad, incomplete darker apical fascia that broadens well inside the lateral margins and adjoins the darkened base of the third segment; base of fourth segment rather obscurely darkened on the median half. Genitalia brownish red.

HOLOTYPE.—Male, Nova Teutonia, Brazil, October 16, 1936 (Fritz Plaumann), received from Dr. C. L. Fluke.

This species, while greenish in life, will undoubtedly fade to a greenish yellow or pale reddish color on the light areas, and dark rusty reddish on the darker green areas. It is at once separated from *varichaeta* Curran by the absence of a median facial vitta. The black prescutellar spot is similar to that of *mocana* Curran but that species has wholly yellow bristles, a yellow pilose mesonotum, yellow pilose femora, etc. I have before me a specimen of *mocana* from Peru.

Volucella morpho, new species

Thorax metallic greenish black with strong violaceous and greenish reflections dorsally; scutellum reddish; head mostly black; abdomen green-blue on the disc. Length, 10.5 mm.

FEMALE.—Head black, the face with a gently tapering, broad, reddish stripe extending from the eyes to the anterior oral margin and separated from the reddish anterior half of the cheeks by a broad black line. The upper part of the face and the pale facial vittae are white pollinose and pilose. Front shining, widening on the anterior three-fourths, black pilose, the small, sharply defined depressions with short, thick white hair that gives a sericeous appearance. Occiput cinereous pollinose, with short, yellow pile and only a few short black hairs above; no long occipital cilia. Face strongly produced downward and slightly forward as a long cone, the upper part rather deeply concave, the tubercle large but low and not conspicuous. Antennae reddish, the arista with the apical third and the long rays black. Eyes with rather short, pale yellowish pile.

Thorax dark greenish, the dorsum with metallic green and violaceous opalescence. Humeri yellow. Posterior calli and scutellum reddish. Pile yellow, the bristles black. Scutellar depression deep; apex of scutellum with black hair, the sides and base with yellow pile, the disc

denuded. There may be some black pile on the disc of the mesonotum posteriorly, but it is denuded in the type.

Legs black or brown, the knees very narrowly reddish; pile black.

Wings with brownish tinge which becomes deeper along the costa on the apical half; veins yellow basally. Squamae and fringe pale yellowish. Halteres reddish yellow.

Abdomen with the broad base, sides and fourth segment reddish to pale castaneous, the disc metallic dark greenish blue, the apex black; the dark color extends forward in the middle to the base of the second segment where it expands slightly, rounding the inner ends of the reddish spots. The dorsum of the abdomen is largely denuded but the pile on the base of the abdomen and on the disc of the fourth segment is rather long and yellowish; on the fifth segment and apical sternites it is black. The basal four sternites bear yellow pile, the basal three being reddish in ground color.

HOLOTYPE.—Female, Pernambuco, Brazil (Curran collection).

Volucella aster, new species

Black with strong blue and violaceous reflections, wings brown in front and apically; base of abdomen, middle of pleura and sides of face yellowish or reddish. Length, 9 mm.

FEMALE.—Front shining black, black pilose, the lateral depressions narrow. Occiput and face with pale yellow pile, the occiput with short black hair near the vertex and with cinereous white pollen. Cheeks brownish red, yellowish anteriorly; sides of the face broadly yellow, the black stripe separating the face and cheeks very wide; face with white pollinose band above. Face moderately concave above, rather strongly produced downward, the tubercle large, broad, prominent. Antennae brown; arista reddish on the basal half and with long black rays. Eyes with cinereous pile on the upper two-thirds.

Thorax black, the mesopleura, pteropleura, humeri and posterior calli reddish. Pile yellow, a few black hairs on the pteropleura; mesonotum damaged but evidently with scattered long black hairs intermixed with the yellow. Mesonotum and scutellum with strong, violaceous opalescence. Scutellar depression deep, the pile wholly black.

Legs black, the tips of the femora reddish; pile black.

Wings brown in front of the fourth vein and in the apical third of the discal cell, broadly grayish posteriorly, the remainder clear hyaline. Squamae whitish basally, becoming brown on the border, and with brown fringe. Knob of halteres white. Marginal cell short petiolate.

Abdomen shining black with strong bluish and violaceous reflections, the first segment and more than the basal half of the second yellow except on the sides. Pile pale yellowish, but with a broad, incomplete band of black on the apex of the second segment; the apical third of the third segment except laterally, almost the apical half of the fourth in the middle, and the whole of the fifth segment with black pile. Venter reddish yellow on the basal half and with pale pile except apically.

HOLOTYPE.—Female, Piches and Perene Vs, Peru, 2000–3000 ft. (Curran collection).

Because of the damaged condition of the thorax I have hesitated to describe the specimen, which I have had for many years. Since no additional material has come to hand it seems advisable to publish the description at the present time.

Volucella roraima, new species

Rusty reddish and metallic black; wings pale brownish; face with median black vitta. Length, 11 mm.

FEMALE.—Front black, the lateral depressions moderately wide but poorly marked. Occiput cinereous pollinose and pale pilose, with short black hair near the vertex. Face, cheeks and lower occiput reddish, face with a wide, entire median brown vitta and with a thinly pollinose whitish band above, moderately concave above and considerably produced downward, the tubercle large. There is no distinct dark line separating the face and cheeks. Antennae reddish brown; arista black on the apical half and with long black rays. Eyes with brownish pile.

Thorax reddish, the pectus and mesonotum, except on the broad sides, black with violaceous opalescence. Pile yellow, the mesonotum with black hair predominating behind the suture and in the middle anteriorly, but there is a large amount of short, pale pile intermixed. The pale pile may be in the form of vittae but the mesonotum is somewhat rubbed and this cannot be determined. Scutellum with black hair except on the narrow base, the bristles strong.

Legs black and black-haired, the tips of the femora very narrowly reddish.

Wings brownish, somewhat paler posteriorly; marginal cell open; stigma brown. Squamae whitish with broad brown border and fringe. Knob of halteres white.

Abdomen black, with strong violaceous opalescence; first and second segments reddish, the apical fourth of the second black except laterally; the reddish color extends broadly along the sides of the third segment and onto the fourth almost to the middle. Pile whitish, black on the third segment except for a sub-basal fascia, on the posterior fourth of the second and on the fifth segment and apical sternites. Basal three sternites reddish.

HOLOTYPE.—Male, Mt. Roraima, Brazil, Dec. 2, 1927, 6900 ft. (G. H. H. Tate).

Volucella inconsistens, new species

Black and greenish yellow, the apical veins broadly clouded with brown; face with median brown vitta. Length, 9 mm.

FEMALE.—Front blackish, more or less brown on the lower half, the sides broadly reddish yellow on the lower two-thirds; pile black. Occiput cinereous pollinose and yellow pilose. Cheeks reddish, separated from the face by a broad brown stripe. Face reddish yellow or yellow, with broad, brown median vitta, in profile moderately concave above, produced downward and somewhat forward as a long, acute cone, the tubercle small; pile short and yellowish; pollinose band beneath the antennae whitish. Antennae reddish brown or brownish red; arista reddish with the long rays and apical third black. Eyes with cinereous pile.

Thorax black, the upper half of the pleura yellowish except the broad anterior border of the mesopleura on the lower two-thirds. Broad sides of the mesonotum greenish yellow, the disc with violaceous opalescence. Pile yellow, black behind the suture except for three pale stripes on the anterior half and a few scattered yellow hairs laterally, in front of the suture with scattered, longer black hair medianly. Scutellum brown with the entire border reddish or yellowish, the depression deep, the pile wholly black.

Legs black and with black hair.

Wings cinereous hyaline, the veins on the apical half of the wing bordered with brown, the fourth vein and all the crossveins with very broad borders and with a large costal spot before the apex of the wing; area between the stigma and apical cloud pale; the sub-costal cell and the apical third of the first basal cell brown. Marginal cell open. Squamae white, with brown fringe and partly brown rim. Knob of halteres white.

Abdomen greenish yellow, the apical half of the second to fourth segments, and the whole of the fifth black, the black fascia on the second segment well separated from the lateral margins, that on the third reaching the sides obscurely. Pile black, yellow on the basal pale area and on the basal three sternites. Basal two sternites and the anterior border of the third pale.

TYPES.—Holotype, female, Mt. Roraima, Brazil, 5400 ft., November 9, 1927 (G. H. H. Tate). Paratype, female, summit Mt. Roraima, 8600 ft., November 24, 1927 (Tate).

Volucella contumax, new species

Black and yellowish; wings cinereous hyaline; face with short, median black stripe. Length, 8.5 mm.

MALE.—Face and front yellow, yellow pilose, the face with a brown vitta on the lower half which bears black pile, the face and cheeks separated by a broad brown band, the cheeks mostly brown behind. Frontal triangle small, flat, rather strongly produced. Vertical triangle and occiput black, the former with black pile, the latter cinereous pollinose and yellow pilose. Face deeply concave above, the lower part very prominent, produced downward, the tubercle moderately large and very prominent, its sides sub-parallel. Antennae reddish. Eyes yellowish pilose.

Thorax black, the upper half of the pleura yellow except on the broad anterior border of the mesopleura. Sides of the mesonotum broadly yellow, the notopleura brown, the disc with violaceous opalescence. Pile yellow, the scutellum with black hair except on the base. Bristles black. Scutellum blackish, opalescent, the whole border yellow.

Legs black, only the knees very narrowly yellowish. Pile black.

Wings cinereous hyaline; marginal cell closed. Squamae white with brown fringe. Halteres white.

Abdomen black with strong violaceous reflections, the first segment, basal half of the second and large, transverse triangles on the basal third of the third, yellowish. Pile yellow, black on the apical two-fifths of the second and third segments except laterally. Venter black, the basal sternite yellow, the pile all yellow. Genitalia blackish, black pilose, unusually large for the genus.

HOLOTYPE.—Male, Brazil (Williston collection).

Volucella plaumanni, new species

Black, the face reddish on the lower half; base of tarsi yellow. Length, 8.5 mm.

MALE.—Head black, the lower half of the face reddish, separated from the yellow portion of the cheeks by a broad black line, the cheeks black on the posterior two-thirds. Face with a white pollinose band above that expands strongly in the middle. Frontal triangle small, flat, yellow pilose, a few black hairs above. Occiput cinereous pollinose, with short yellow hair; vertical triangle with long black hair. Cheeks and face with yellow pile. Face deeply concave above, almost perpendicular below the small, prominent tubercle, obtusely conical. Antennae reddish, the third segment mostly brownish red; arista black apically and with long black rays. Eyes with brown pile which becomes yellow on the broad posterior border.

Thorax shining greenish black, pile yellowish on the pleura, black dorsally; when viewed from behind with four broad, broadly separated, yellow pilose vittae.

Scutellum reddish brown, yellow pilose on the disc, with scattered long black hairs, the border with black hair, the ventral fringe yellow; the bristles weak, black. Pteropleura with a few black hairs above.

Legs black, the basal two tarsal segments of the posterior four legs yellow; pile black, the posterior femora with some reddish-brown hair below, the fine hair on the front and posterior coxae yellow.

Wings with brown tinge; anterior crossvein weakly bordered with brown. Squamae and fringe brown. Halteres white.

Abdomen shining black, with short, pale yellow pile, the apex of the fourth segment and the

whole of the fifth except on the narrow sides, black pilose. Venter pale pilose. Genitalia black and with black hair.

HOLOTYPE.—Male, Nova Teutonia, Brazil, September 1, 1936 (Fritz Plaumann), received from Dr. C. L. Fluke.

Volucella obscurior, new species

Black, the scutellum obscure reddish; base of tarsi yellow. Length, 7 to 8.5 mm.

MALE.—Head black, only the broad, ventrally abbreviated stripe separating the face and cheeks yellowish; pile black, yellow on the occiput, cheeks and middle of the face. Frontal triangle small but convex. No long occipital cilia, the hair very short and black on the upper fifth of the occiput, the occiput cinereous pollinose. Cheeks wide. Face moderately produced downward, moderately concave above where there is a band of cinereous pollen, perpendicular below the medium-sized, rounded tubercle, the tubercle outlined above by lateral depressions. Antennae brown, the basal segments usually brownish red; arista reddish with the apex and long rays black. Eyes with black pile, the posterior border with sparser, yellow pile, across the middle with a thinly pilose band. Frontal triangle usually yellow pilose except on the broad border.

Thorax black, the pleura with thin brownish pollen. Pile bright reddish yellow, on the mesonotum black behind the suture but with a prescutellar band of yellow that expands in the middle and may extend forward as a narrow line to join the yellow pile in front; toward each side, when viewed from behind, is a broad stripe of shorter, yellow pile mixed with the black and there are indications of similar dorsocentral vittae in some specimens. Scutellum dark reddish to brownish red with the sides blackish, at times only the depression reddish; pile black, dense on the basal half, the apex with some long yellow hairs, the ventral fringe yellow. Base of scutellum rather strongly raised, this being accentuated by the dense pile.

Legs black, the basal two or three segments of the posterior four tarsi reddish or reddish yellow; pile black, yellow on the basal half of the front coxae and on the hind pair, long and dense on the dorsal surface of the posterior tibiae.

Wings reddish brown, the color becoming paler posteriorly and apically, and on the basal half of the wing. Marginal cell usually widely open. Squamae blackish, the fringe rather golden with dark base. Knob of halteres white.

Abdomen shining black. Pile very short, yellowish on the basal two segments and on the sternites, black on the apical two tergites. In some views there is considerable pale pile on the third segment and the sides of the abdomen bear longer yellow pile. Genitalia black or brown, wholly black-haired.

FEMALE.—Front wide, the broad lateral depressions conspicuously wider than the convex, median stripe which forms a large, low tubercle below the middle of the front; pile yellowish, almost whitish on the depressions where it is thicker and directed upward, black on the upper third or less. Face without black pile laterally. Pile of thorax shorter and more brassy, the black pile forming a broad band between the bases of the wings. All the coxae and the bases of the femora bear yellow pile; pile on posterior tibiae shorter and less abundant; basal tarsal segments sometimes pale reddish yellow; third abdominal segment pale pilose except for a broad, incomplete apical band of black.

TYPES.—Holotype, male, and allotype, female, July 7, 1936. Paratypes, five males and seven females, Nova Teutonia, Brazil, July 6 to November 7, 1936 (Fritz Plaumann), received from Dr. C. L. Fluke.

Because of the dense pile on the basal half of the scutellum this species has something of the appearance of some of the *Apophysophora* Williston but it lacks the low tubercles. The very thinly pilose band across the eyes is similar to that found in some species of *Trichopsomyia* Williston. While it is very similar, superficially, to *plaumanni*, new species, it is very distinct, the face being very much shorter and the arrangement of the pile very different.

Volucella zephyra, new species

Brownish and rusty reddish, with violaceous reflections, face produced downward and forward; scutellum with lateral depressions. Length, 8.5 mm.

MALE.—Front, vertex and occiput black; face, cheeks and lower occiput reddish, the face and cheeks separated by a narrow blackish line. Pile yellowish, black on the vertical triangle. Occiput cinereous pollinose, the face with a band of whitish pollen above. Face deeply concave above, rather strongly produced forward and downward as an acute cone, the tubercle moderately small but conspicuous. Antennae reddish, the arista black apically and with long black rays. Eyes with yellowish pile on the upper half or more, bare below.

Thorax rusty reddish, brown above and with strong violaceous opalescence. Pile black, yellow on the propleura and in front of the mesonotum laterally; from posterior view with a slender median stripe of yellow pile, and short, broader stripes of paler pile toward the sides on broad, incomplete, pale greenish sublateral vittae. Scutellum with the apical depression deep, the lateral, slightly depressed roughened areas transverse; pile wholly black; bristles weak.

Legs reddish, the apical two or three segments of the posterior four tarsi, and the apical four of the front pair, blackish, the posterior tibiae about half brown on the upper half; pile black.

Wings with brown tinge, the veins all brown, Stigma luteous, with large basal brown spot.

Marginal cell narrowly open. Squamae and their fringe brown. Knob of halteres white.

Abdomen reddish castaneous, the apices of the second and third segments with narrow, black fasciae. Pile white, a black fascia on the apex of the fourth segment, on the fifth more yellowish; black on the middle of the venter and on the genitalia. Genitalia reddish.

HOLOTYPE.—Male, Nova Teutonia, Brazil, October 2, 1936 (Fritz Plaumann), received from Dr. C. L. Fluke.

This species is close to *deceptor* Curran and it may be difficult to separate the two. However, both sexes of *deceptor* have the legs mostly brownish and the pile of the thorax is shorter.

Volucella emilia, new species

Rather similar in color to *esuriens* Fabricius and *rica*, new species, but at once distinguished by the presence of prescutellar bristles and strong marginal scutellars. Brownish or castaneous, the abdomen more blackish. Length, 12 mm.

FEMALE.—Face and front black pilose, the occiput and cheeks with yellow pile. Front narrow, reddish brown; occiput cinereous white pollinose. Face brownish yellow, the cheeks and a broad median vitta on the lower half of the face brown, the upper half and sides with cinereous pollen. Face deeply concave on the upper two-fifths, moderately produced downward, the tubercle large and broad, the face perpendicular below it. Antennae brown, the basal segments more reddish; third segment weakly kidney-shaped, concave in the middle above; arista reddish on the basal half, the rays long and black. Eyes black pilose.

Thorax black, the dorsum castaneous, paler laterally, black pilose, some scattered pale hairs in front of the suture. A row of about twelve prescutellars, the scutellum with seven pairs of marginals arising from very weak tubercles. Propleura with pale pile.

Legs brown or black, the knees very narrowly reddish; hair wholly black.

Wings rather cinereous with the veins bordered with brownish, the costal border very broadly dark brown on the basal half. Squamae grayish, with brown border and fringe.

Abdomen blackish, with slight cupreous sheen, not greatly longer than wide, wholly black-haired.

HOLOTYPE.—Female, Sa Emilia, Pochuta, Guatemala, 1000 m. (J. Bequaert).

Volucella apicula, new species

Black and yellowish; wings yellowish with the veins clouded with brown on the apical fourth. Length, 10 mm.

MALE.—Frontal triangle black, thickly cinereous yellow pollinose but with a small shining spot in the middle anteriorly; strongly convex; pile reddish yellow. Vertical triangle black, reddish yellow pilose. Occiput black except below, cinereous pollinose and yellow pilose. Face and cheeks reddish or reddish yellow, separated by a brown stripe, the cheeks narrowly blackish posteriorly, the face with a brown median vitta. Face moderately produced downward, perpendicular, the tubercle large and moderately prominent. Upper third and sides of face grayish pollinose, the pile yellow; middle of face with black pile except above. Antennae brownish red; arista with long black rays and apex. Eyes thickly reddish yellow pilose.

Thorax black, the pleura rather thickly yellowish gray pollinose, the mesonotum opalescent. Humeri, posterior calli and scutellum reddish yellow. Pile bright yellow, the disc of the scutellum with black hair on the apical half; a row of four prescutellar bristles.

Legs black, the bases of the tibiae narrowly reddish brown. Pile black, yellow only on the posterior coxae and the base of the front pair.

Wings yellowish, grayish behind, with a brown cloud occupying a little more than the apical fourth and fading out posteriorly. Marginal cell not widened, long petiolate. Squamae white, with yellow border and fringe. Halteres white.

First abdominal segment black with the sides reddish; second segment reddish yellow with the broad middle and narrower, incomplete basal and apical fasciae black. Third segment black with very large, basal reddish triangles that expand laterally to occupy the whole length of the segments; fourth segment with the sides broadly reddish in the form of a triangle that is broad basally. Pile reddish yellow, black on the apex of the second segment except laterally, on the middle and apical third of the third and on the apical third of the fourth. Basal sternite brown, the second and base of the third yellowish. Pile yellow, black on the two apical sternites except basally. Genitalia black, black pilose.

FEMALE.—Front shining black, yellow pilose, grayish pollinose laterally and in front. Fifth abdominal segment black-haired.

TYPES.—Holotype, male, Middle Rio Ucayali, Peru, November 27, 1923 (H. Bassler). Allotype, female, Tabernilla, Canal Zone, Panama.

Volucella bruneri, new species

Black, the base of the abdomen luteous; pleura pale pilose in front; prescutellars moderately strong; face black. Length, 10 mm.

MALE.—Head black, the face and cheeks separated by a broad, gently tapering yellow stripe. Frontal triangle small, gently convex, with mixed black and yellow pile. Vertical triangle and the upper sixth of the occiput with black hair. Occiput, face and front with cinereous yellow pollen; pile pale yellowish, the cheeks and tubercle with black hair; frontal triangle thinly pollinose. Face rather strongly produced downward and slightly forward as a sharp cone, gently concave above, the tubercle moderately long but not prominent. Antennae brownish red, blackish basally; third segment with sub-parallel sides,

obtuse apically, gently concave in the middle above; arista and its long rays black. Eyes yellowish pilose.

Thorax black, greenish opalescent dorsally, the humeri, narrow sides behind the base of the wings and the lower border of the scutellum reddish. Pile black, yellow on the propleura and anterior half of the mesopleura; in front of the suture mostly yellow and the yellow hairs extend back behind the suture to the middle of the mesonotum. Two pairs of moderately strong prescutellars; scutellum narrowly yellow pilose basally.

Legs black, black pilose.

Wings grayish brown; marginal cell petiolate, not widened. Squamae brown, with black border and fringe. Knob of halteres white.

Abdomen shining black, the first segment brownish, the second luteous or reddish except on the apical fourth or less. Pile black, yellow on the fourth segment, on the basal fifth of the second and on the middle of the first. Venter mostly reddish, becoming black apically, the pile yellow. Genitalia black and with black pile.

HOLOTYPE.—Male, Loma del Gato-Sierra del Cobre, Oriente, Cuba, September 24–30, 1935 (J. Acuna, S. C. Bruner, L. C. Scaramuzza), received from Dr. C. L. Fluke.

Volucella marceli, new species

Black, the abdomen partly castaneous or reddish; face reddish, with slightly darker median vitta; wings pale yellowish brown. Length, 8.5 mm.

MALE.—Front shining black, broad, gently convex, black pilose. Vertical triangle with black hair. Occiput cinereous pollinose and with short, brown pile. Cheeks black. Face reddish, moderately produced downward, rather gently concave above, the tubercle large but low; pile black, yellow on the sides of the lower half; face with rather thin cinereous pollen except on the lower two-thirds of the very broad median vitta. The face is somewhat stained so that it is impossible to determine whether there is a blackish median vitta, but this portion is darkened and one is indicated. Antennae brownish red; arista with long black rays and apex. Eyes brown pilose.

Thorax black, the dorsum with violaceous opalescence; pile wholly black. Scutellum reddish brown. Three or four pairs of moderately strong prescutellar bristles.

Legs black, the pile wholly black.

Wings strongly tinged with brown; marginal cell open. Squamae brownish, the fringe brown. Knob of halteres yellow.

Abdomen black, castaneous basally and laterally; pile black, cinereous on the second segment and on the middle of the first. Venter castaneous, with yellow pile except apically. Genitalia brownish red, with yellow and black pile.

HOLOTYPE.—São Paulo, Brazil, December, 1930 (Barbiellini). Named in honor of Marcel Barbiellini.

The specimen is not in any too good condition, but it is very different from any known species. If the face lacks a median dark vitta this species will trace to couplet 83. In this case it may be at once distinguished from the two species contained therein by lacking the triangular process on the propleura, the base of the front coxa being exposed, and also by the open marginal cell.

Volucella sultzi, new species

Black, the scutellum and sides of the abdomen reddish; face brownish red in the middle, dark above. Length, 11 mm.

MALE.—Frontal and vertical triangles shining black, black-haired, the former rather large, flat, the eyes touching for a shorter distance than the length of the frontal triangle. Occiput cinereous pollinose and pale yellow pilose. Face almost perpendicular, gently concave above, moderately produced downward as a broad cone, brownish cinereous pollinose, the broad middle bare on the lower two-thirds, the tubercle large and moderately prominent. Face brownish above, brownish red below, separted from the cheeks by a broad, tapering reddish stripe; cheeks black. Antennae brown, the basal segments more reddish; third segment kidney-shaped, rather deeply concave above, the apex obtuse; arista brownish with reddish base, the rays black. Eyes brown pilose.

Thorax blackish and castaneous, black pilose, the mesonotum with yellow pile intermixed; prescutellars long and fine. Humeri yellowish; scutellum dark reddish, the ventral fringe yellow.

Legs brown, the knees very narrowly reddish. Pile black.

Wings light brownish, rather reddish on the basal third; marginal cell narrowly open. Squamae reddish yellow, with tawny fringe. Halteres yellow.

Abdomen black, the sides of the second and third segments very broadly reddish. Pile yellow, black on the broad apex and middle of the third segment and on the fourth except on small basal triangles and the lateral margins. Venter brown, the incisures reddish; pile yellow. Genitalia blackish, black-haired, rather large.

HOLOTYPE.—Male, Alto d. Serra, Brazil, August, 1929 (R. Sultz).

Volucella rosa, new species

Black and reddish; wings brownish apically, luteous basally; face reddish. Length, 9 to 12 mm.

MALE.—Frontal triangle reddish, brown on the upper half, grayish yellow pollinose and black pilose, rather large and moderately convex. Vertical triangle small, brown, black pilose. Oc-

ciput black except above the posterior oral margin, cinereous yellow pollinose and yellow pilose. Cheeks black on the posterior half, separated from the face by a broad brownish line. Face reddish, with yellowish pollen, the middle very broadly shining on more than the lower half; the pile yellow, black on the middle of the shining stripe; in profile produced moderately downward, almost perpendicular, gently concave above, the tubercle large but not prominent. Antennae reddish, the third segment regular in outline, gently tapering to the middle, thence with almost parallel sides to the rounded apex; arista reddish, with long black rays and apex.

Thorax black, the humeri, posterior calli and scutellum reddish; mesonotum with opalescent green reflections. Pile black, on the mesonotum and mesopleura abundantly mixed with reddish yellow, the scutellum with a basal band and the ventral fringe reddish yellow. Two pairs of moderately strong prescutellars.

Legs black or brown, black pilose.

Wings brownish on the apical half, rather luteous basally; apical cell open or closed. Squamae and fringe reddish. Knob of halteres white.

Abdomen black; second segment reddish with broad black median vitta, the third with a broadly interrupted basal reddish fascia that widens laterally. Pile black, yellow on the first and second segments, the second with numerous black hairs laterally in front. Venter black, the sides of the second and third sternites broadly reddish; pile yellow basally; black on the middle of the fourth and on the whole of the fifth sternite. Genitalia shining black and with black pile. The sides of the first tergite are broadly dull reddish.

FEMALE.—Front black, broadly reddish anteriorly, the lateral depressions deep, thickly yellowish pollinose, the median stripe strongly convex; pile yellow, black at the vertex. Upper half of the pleura yellow pilose, the mesonotum with very few long black hairs. Knob of halteres yellow. Fifth abdominal segment wholly black-haired.

TYPES.—Holotype, male, and allotype, female, Middle Rio Ucayali, Peru, September 19, and November 26, 1923 (H. Bassler).

Volucella variegata Bigot

BIGOT, 1875, Ann. Soc. Ent. France, p. 478.

Volucella comastes WILLISTON, 1891, Biol. Centr. Amer., Dipt., III, p. 52.

There is evidently considerable variation in the color of this species. The male may have the thorax almost all black, the sides of the mesonotum and presutural spot only slightly lighter in ground color and the scutellum may be brownish with paler border. Ordinarily these areas are very much paler than the disc of the mesonotum and are yellowish or reddish in the female. Giglio Tos placed *comastes* as a synonym of *variegata* on the basis of several males and one female from Mexico. The single male before me is from Guatemala.

Volucella camposi, new species

Blackish, the face reddish; scutellum brownish red; wings clear hyaline. Length, 9 to 11 mm.

MALE.—Frontal triangle brownish, cinereous yellow pollinose and black pilose, reddish in the middle immediately above the antennae, of moderate size, rather strongly convex anteriorly where there is a low, rounded tubercle above the lunula. Vertical triangle small, black, black-haired. Occiput black, cinereous pollinose and whitish pilose. Face and cheeks reddish, black pilose, the face broadly pale pilose above and on the sides to below the middle, in profile, only a little produced downward, moderately concave above, the tubercle large, rounded, prominent. Antennae reddish, the arista with long black rays and apex; third segment tapering to the apical third, thence with almost parallel sides to the rounded apex. Eyes yellow pilose.

Thorax black, black pilose, the mesonotum with five broad, whitish pilose vittae from posterior view, the median three confined to the anterior half; mesonotum with strong greenish opalescence. Scutellum with the disc reddish, the border dark brown, with pale hairs only on the narrow base. Three pairs of prescutellars.

Legs brown, black pilose.

Wings clear hyaline, the stigma ochre yellow, without dark basal spot; marginal cell not widened, closed and petiolate. Squamae whitish or pale yellowish, with brown border and fringe. Knob of halteres white.

Abdomen castaneous with the broad apices of the second and third segments and a median vitta, black. Pile black, the second and third segments with broad basal fasciae of whitish pile, the first whitish in the middle, the fourth with a broadly interrupted pale pilose fascia basally. Genitalia black, pale pilose. Venter black, pale pilose on the basal sternites.

FEMALE.—Front shining black, the anterior fifth reddish, with yellow pollen except in the middle; lateral depressions moderately deep, cinereous pollinose, the median stripe rather gently convex; pile wholly yellowish. Thorax wholly pale yellow pilose. Abdomen black, with broad, medianly narrowed whitish pilose fasciae on the second to fourth segments, the fifth segment practically all pale pilose, the ground color slightly reddish or metallic beneath the pale pile. Venter with black pile only on the middle of the fourth sternite apically and on the broad apex of the fifth.

TYPES.—Holotype, male, and allotype, female, Puerto Grande, Isla Puna, Ecuador (F. Campos R. and Santiago A. Navarro).

This species is very similar in appearance to *vitripennis* Curran, from Guiana, but

that species has the front wholly black and largely black pilose, the pleura of the female is mostly black pilose, and there are a number of other differences. The male of *vitripennis* is unknown but will probably resemble that of *camposi*. The squamal fringe of *vitripennis* is rather golden or reddish being distinctly paler than in *camposi*.

Volucella persimilis Williston

This species and *fuscipennis* Macquart have a close superficial resemblance to *macquarti* Curran, *sultzi*, new species, *marceli*, new species, etc., but apparently form a group by themselves. In both species the propleura is of peculiar shape, being produced downward on the posterior three-fourths as a large triangle that conceals the base of the front coxae from lateral view.

Volucella procteri, new species

Black with strong greenish opalescence; face reddish; wings brownish, darker in front. Length, 12 mm.

FEMALE.—Front black, narrowly reddish and cinereous pollinose in front, black pilose, the lateral depressions shallow and pale pilose. Occiput with cinereous yellow pollen and yellow pile. Face and cheeks reddish; face moderately produced downward, perpendicular in profile, the tubercle large, broader than long, moderately prominent; face with black pile except on the sides, cinereous pollinose above and laterally. Antennae reddish, the apical half of the third segment black; arista black; third segment very wide basally, strongly narrowed to the middle, thence gently tapering to the rounded apex.

Thorax black, the dorsum greenish opalescent, the disc of the scutellum rather dull. Hair black, the mesonotum with pale pilose vittae from posterior view and with yellow pilose prescutellar fascia; pleura mostly yellow pilose, with strong black hairs intermixed on the upper half. A complete row of prescutellar bristles, the scutellar hair wholly black.

Legs reddish, the tarsi blackish except basally; pile black, the anterior and posterior coxae mostly yellow pilose.

Wings brownish, darker anteriorly, the veins brown. Marginal cell long petiolate, not widened. Squamae pale basally, with broad brown border and fringe. Knob of halteres reddish brown.

Abdomen black, the dorsum rather metallic green with strong violaceous opalescence. First segment black except laterally; second with the apical third blackish except laterally and with dark basal fascia and median vitta; third segment black with a basal greenish fascia that gradually broadens toward the sides where it occupies about the basal half, the dark posterior fascia becoming metallic blue or violaceous toward the sides. Pile black on the dark portions of the second and third segments, on the fourth except for the broad, laterally widening basal fascia and on the fifth except on the basal corners; pile of the dorsum otherwise almost white, or very pale yellowish. Venter with strong greenish opalescence, the second sternite with a large oval, yellow spot toward either side; pile yellow, broadly black on the apices of the sternites.

HOLOTYPE.—Female, Nova Teutonia, Brazil, August 20, 1936 (Fritz Plaumann), received from Dr. C. L. Fluke.

It gives me great pleasure to name this fine species in honor of Dr. William Procter in recognition of his contributions to entomology.

Volucella teffera, new species

Metallic brown and reddish; wings with quadrate brown spot in middle anteriorly, the veins lightly bordered with brown. Length, 12 mm.

FEMALE.—Front brown above, becoming reddish anteriorly, the lateral depressions shallow; pile tawny, mixed with black on the upper third. Occiput brown, with brownish-gray pollen and pale yellow pile. Face and cheeks reddish, tawny pilose; the face with cinereous pollen above. Face rather deeply concave above, prominent below, the tubercle large but low, only a little produced downward. Antennae reddish; arista with the apical third and rays black. Eyes almost bare, with scattered, short black hairs above.

Thorax dark reddish, the mesonotum brownish with strong metallic sheen except laterally. Pile brown, yellow on the propleura and on the sides of the mesonotum in front. Scutellum metallic brownish red, the pile wholly black.

Legs reddish, the posterior tibiae mostly brown; tarsi blackish, the basal segment of the posterior pair reddish.

Wings hyaline, the veins clouded with pale brown, on the middle in front with a subquadrate brown spot. Marginal cell closed and petiolate. Squamae cinereous yellow basally, becoming brown on the margin and with brown fringe. Knob of halteres white.

Abdomen brown with very strong metallic green luster, the basal and fifth and sixth segments reddish. Pile black, an interrupted basal fascia of whitish pile on the second segment. Venter reddish brown, paler apically, strongly metallic, the pile whitish on the basal three sternites, black apically.

HOLOTYPE.—Female, Teffe, Brazil, December, 1924 (H. Bassler).

Volucella bassleri, new species

Metallic blue or blue-green with violaceous reflections; face reddish; wings with quadrate

brown spot in middle anteriorly. Length, 14 mm.

MALE.—Front, face, cheeks and lower occiput reddish. Vertical triangle black, black pilose. Occiput blackish, yellowish gray pollinose, yellow pilose. Face not very prominent below, the tubercle large, the face gently concave above the tubercle and cinereous pollinose; face slightly produced downward; pile reddish yellow, black on the sides of the face on the upper half, on the middle of the tubercle and on the frontal triangle. Antennae reddish, the arista with long black rays and apex. Eyes grayish yellow pilose.

Thorax black, metallic above, with violaceous and greenish opalescence. Pile black, brown on the disc of the mesonotum. Scutellum brownish, black-haired. Humeri pale yellowish.

Legs wholly black, black pilose.

Wings tinged with brown, slightly darker anteriorly, in the middle in front with strong, quadrate brown spot. Marginal cell petiolate. Squamae brown. Knob of halteres white.

Abdomen metallic blue or blue-green, with strong violaceous reflections. Pile black, white on the median half of the second sternite. Genitalia brown.

HOLOTYPE.—Male, Iquitos, Peru, June 15, 1927 (H. Bassler).

Volucella externa, new species

Blackish, the pleura reddish above; abdomen violaceous green or blue; wings with a median quadrate spot and the narrow costal border brown. Length, 12 to 13 mm.

MALE.—Face, front, cheeks and lower occiput reddish, reddish yellow pilose, the frontal triangle with some black hair. Vertical triangle and occiput black, the former black pilose, the occiput cinereous yellow pollinose and yellow pilose; cheeks black pilose. Face moderately concave above, a little prominent below, the tubercle of medium size, marked off laterally by broad depressions. Antennae reddish, the arista with long black rays and apex. Eyes with dull tawny pile.

Thorax blackish, the upper half of the pleura and broad sides of the mesonotum reddish. Mesonotum greenish opalescent. Pile black, yellowish on the propleura; reddish yellow on the sides of the mesonotum in front and on much of the upper half of the pleura. Scutellum brownish red, with violaceous reflections on the disc; pile wholly black.

Legs black or brown, the knees very narrowly reddish; pile black.

Wings with luteous tinge, with a large quadrate brown spot in the middle and the narrow costal border between that and the apex of the wing brown, the costal stripe broadened at the apex of the marginal cell. Marginal cell petiolate. Squamae reddish yellow, more or less broadly tinged with brown apically, the fringe brown or brownish red. Knob of halteres pale yellow.

Abdomen shining metallic green or blue, with violaceous reflections, the base broadly obscure brownish red. Pile black, a band of yellow pile across the base of the second segment and on the middle of the first. Venter brownish, pale pilose, the fifth sternite with black pile on the apex. Genitalia brown and reddish, black-haired.

TYPES.—Holotype, male, and paratype, male, Rio Maranon, Peru, February, and Rio Santiago, Peru, September, 1924 (H. Bassler).

Volucella cyanoprora, new species

Reddish brown; wings with median brown spot in front and weakly brown on apical third of anterior half. Length, 7 mm.

FEMALE.—Front brown on the upper third, greenish yellow below, the depressions narrow but conspicuous. Occiput brown, cinereous pollinose and whitish pilose. Face greenish yellow, moderately concave above, strongly produced downward as an acute cone, the tubercle low and weak; pile pale yellowish; a broad band of white pollen below the antennae. Antennae orange, the arista with long black rays and apex. Eyes cinereous white pilose.

Thorax rusty brownish red, the dorsum with more or less violet opalescence; pile black, but more or less extensively whitish in front of the mesonotal suture. Scutellum colored like the mesonotum, its hair wholly black.

Legs reddish brown, the knees and basal two or three tarsal segments reddish; pile black.

Wings hyaline, the quadrate brown spot in the middle anteriorly, produced back as broad clouding along the crossveins, the apical third of the wings conspicuously brownish on the anterior half and along the posterior border. Marginal cell very short petiolate. Squamae whitish, with reddish-brown fringe. Halteres reddish yellow.

Abdomen brownish, the broad base more reddish. Pile yellow, the second and third segments with broad, incomplete apical bands of black hair, the second with whitish pile anteriorly. Venter reddish brown, white pilose. Abdomen opalescent in some views.

HOLOTYPE.—Female, Caura Valley, Venezuela (Curran collection).

This species is readily distinguished from other members of the *macula* group by its strongly produced face. The face is not nearly so sharply conical in other species.

Volucella maculoides, new species

Rusty reddish, the abdomen more brownish or ferruginous; wings with a quadrate brown spot, the veins beyond the middle clouded with brown. Length, 9 mm.

MALE.—Face, cheeks, lower occiput and front pale reddish yellowish, probably rather greenish in fresh specimens, the pile yellowish. Vertical triangle reddish, black pilose. Occiput brown, cinereous pollinose and white pilose. Face somewhat prominent below, produced downward and slightly forward, the tubercle rather low, mod-

erately concave and pale pollinose above the tubercle. Antennae pale orange, the arista with long black rays and apex. Eyes with cinereous pile.

Thorax rusty reddish, black pilose, the mesonotum with whitish pile toward each side in front and with yellow pile intermixed with the black except posteriorly; pleura sometimes with tawny pile in the middle, the propleura whitish pilose. Scutellum with black hair. About eight prescutellars.

Legs wholly reddish, the pile black.

Wings cinereous hyaline, with a quadrate brown spot in the middle, the veins clouded with pale brownish beyond the middle of the wing. Marginal cell petiolate. Squamae yellowish, with reddish brown fringe. Knob of halteres white.

Abdomen rusty reddish but more or less metallic and appearing somewhat brown or ferruginous; pile white on the first segment, basal half of the second, on the lateral margins and on the whole of the fourth segment. Second and third segments black pilose. Venter reddish, pale yellow pilose. Genitalia reddish, black pilose.

TYPES.—Holotype, male, and paratype, male, Chapada, Brazil (Williston collection).

This species is very similar to *macula* Wiedemann, of which I have seen the types, but the veins are much more conspicuously clouded, the pile is differently colored, etc.

Volucella cyanoprocta, new species

Reddish and brownish, with strong violaceous reflections, wings with quadrate median brown spot in front and the veins conspicuously clouded. Length, 8.5 to 10 mm.

MALE.—Face, cheeks, lower occiput and front reddish, yellow pilose. Frontal triangle small, slightly produced. Vertical triangle and occiput black, the former black pilose, the occiput with cinereous pollen and whitish pile. Face moderately produced downward as an acute cone, gently receding below the rather low tubercle, moderately concave above, whitish pollinose below the antennae. Antennae orange, the third segment long and gently tapering to the rounded apex; arista with long black rays and apex. Eyes cinereous pilose.

Pleura and broad sides of the mesonotum reddish, the pectus and mesonotum brownish, the latter with greenish and violaceous reflections. Pile black, whitish on the front of the mesonotum laterally and on the pleura, the disc of the mesonotum with yellow pile intermixed with the black. Scutellum brown, the sides more reddish; hair wholly black.

Femora brown, becoming reddish apically; tibiae with reddish bases, the tarsi reddish, becoming brownish apically; coxae brown; pile black.

Wings cinereous hyaline, but largely brownish; a quadrate brown spot in the middle of the wing anteriorly from which a brown stripe extends to the posterior margin of the wing following the crossveins and sixth vein; there is a paler brown cloud occupying the apex of the wing from the stigma to the apex of the discal cell, the apical and discal crossveins are clouded and there is a very broad brown cloud extending along the fourth vein and covering the anterior half of the discal cell; basal half of the first basal cell brown, the costal cell pale brownish. Apical cell petiolate. Squamae with brownish tinge and brown fringe. Knob of halteres white.

Abdomen brownish, with metallic green and violaceous opalescence, the first segment and basal third of the second in the middle, reddish yellow. Pile black, pale yellowish on the fourth segment except apically, the second segment with a broad basal band of white pile that occupies almost the basal half laterally and the basal third in the middle but does not reach the lateral margins. Venter blackish, with pale pile on the second sternite and base of the fourth; first sternite reddish. Genitalia brown, black pilose.

FEMALE.—Front obscure brownish red, probably rather green in fresh specimens, yellow pilose, the vertex with black hair. Eyes with very short pile. Mesopleura largely yellow pilose, the mesonotum with pale pile predominating over most of the surface but always wholly black-haired posteriorly. Venter yellow pilose except apically.

TYPES.—Holotype, male, Peru, December, 1903. Allotype, female, Wismar, British Guiana, October 9, 1933 (A. S. Pinkus). Paratype, female, Kamakusa, British Guiana (H. Lang).

Volucella alcedoides, new species

Blackish with very strong metallic green opalescence dorsally, wings with quadrate median brown spot and darkened apex. Length, 8 mm.

MALE.—Face, front, cheeks and lower occiput reddish yellow, yellow pilose. Frontal triangle small, scarcely convex. Vertical triangle black, black pilose. Occiput black, with scarcely a trace of brownish pollen, the pile white. Face moderately produced downward and somewhat forward as a sharp cone, rather deeply concave above, the tubercle small and not prominent; face broadly whitish pollinose above, with a few black hairs on the tubercle. Antennae orange; third segment long and gently tapering to the obtuse apex; arista with long black rays and apex. Eyes with cinereous pile.

Thorax black, the mesonotum greenish opalescent; humeri yellow; pile black, whitish on the anterior border laterally and on the propleura. Scutellum opalescent on the disc, the hair wholly black.

Legs black, the apices of the femora and the basal tarsal segments reddish; pile black.

Wings with luteous or yellowish brown tinge, darker apically, where they are brownish in front, the veins weakly bordered with darker

brown; at the middle in front with a quadrate brown spot, that is produced backward along the crossveins and sixth vein to the posterior margin. Marginal cell petiolate. Squamae grayish, with brown border and fringe. Knob of halteres white.

Abdomen greenish opalescent above, the basal segment and venter black. Pile white on the fourth segment and on almost the basal half of the second except at the sides, and on the venter except apically, black on the second and third segments and on the fifth sternite and genitalia.

TYPES.—Holotype, male, St. Ann's, Trinidad, August 15, 1933. Paratype, male, Dabadie, Trinidad, August 16, 1933 (A. S. Pinkus).

Volucella acutifrons, new species

Blackish, reddish, greenish and violaceous; wings with quadrate brown spot in front; frontal triangle of male with acute tubercle in the middle. Length, 11 to 14 mm.

MALE.—Face, front, cheeks and lower occiput reddish; pile yellow, mostly black on the frontal triangle which bears a small but prominent, acute tubercle in the middle and is otherwise gently convex. Vertical triangle and occiput black, the former black pilose; occiput with cinereous yellow pollen and rich yellow pile; cheeks with black pile over most of their surface. Face only slightly produced downward, the tubercle very large and moderately prominent, leaving only a short, concave area above, sharply limited on the sides by broad, deep depressions. Antennae orange, the third segment long, gently tapering to the rounded apex; arista with long black rays and apex. Eyes with tawny pile except below.

Thorax reddish, the pectus and disc of the mesonotum brown although the middle of the mesonotum becomes rather reddish anteriorly; the disc of the mesonotum gives off strong violaceous reflections and the scutellum is violaceous except on the free border. Pile black, the mesonotum with a pair of large triangles of yellow pile in front of the suture medianly, with a pair of sublateral yellow stripes on the anterior three-fourths and the anterior border laterally, yellow pilose, the propleura and part of the mesopleura also pale pilose.

Legs brownish, the apices of the femora and basal tarsal segment more or less reddish. Hair wholly black.

Wings with brownish or luteous tinge, darker apically in front and along the veins, in the middle with a quadrate brown spot that extends obscurely back along the crossveins and sixth vein. Squamae reddish, with reddish-brown border and fringe. Knob of halteres white.

Abdomen black, the third and fourth segments opalescent green. Pile black, yellowish on the first segment and less than the basal half of the second. Venter black the second sternite, base of the first and middle of the third anteriorly with yellow pile. Genitalia blackish, black-haired.

FEMALE.—Front reddish, the ocellar triangle brown; pile black, the lateral depressions narrow and shallow. First abdominal segment brownish, the remainder of the dorsum greenish opalescent. No frontal tubercle.

TYPES.—Holotype, male, Tarapoto Region, Peru, January 3, 1926; allotype, female, Iquitos, Peru, February 18, 1924; both collected by H. Bassler.

Volucella panamena, new species

Brownish or ferruginous with greenish opalescence; wings with brown quadrate spot near the middle in front and more or less brownish apex. Length, 9 to 10 mm.

MALE.—Front, face, cheeks and lower occiput orange, yellow pilose, the front with mostly black hair. Frontal triangle small, flat. Vertical triangle and occiput black, the former black pilose, the occiput with thin brownish pollen and whitish pile. Cheeks with black hair above. Face moderately produced downward, scarcely produced forward below the large, low tubercle, rather deeply concave above. Antennae orange, the arista with long black rays and apex; third segment long, slightly tapering to the sharply rounded apex. Eyes with blackish pile.

Thorax rather castaneous, with most of the upper half of the pleura and the broad sides of the mesonotum reddish. Pile black; whitish on the front of the mesonotum toward the sides and on the propleura; disc of mesonotum and scutellum with strong greenish opalescence or violaceous reflections, the free border of the scutellum shining brown.

Legs brownish, the broad apices of the posterior four femora, most of the front pair and the basal four tarsal segments reddish. Pile black.

Wings with a brown median, quadrate spot, the apical half paler brownish, leaving large, paler areas beyond the quadrate spot both in front of and behind the fifth vein, the first basal cell brown on the basal half, the costal cell luteous. Squamae brownish. Knob of halteres white.

Abdomen brownish, the basal segment brownish red; the remaining segments with strong greenish opalescence or violaceous reflections; pile black, white on the first segment, basal third or less of the second and on the second sternite except laterally. Venter wholly brown, black pilose, the genitalia reddish brown.

TYPES.—Holotype, male, Barro Colorado Island, Canal Zone, January 2, 1929 (Curran). Paratype, male, Middle Rio Ucayali, Peru, November 30, 1923 (H. Bassler).

Volucella obliquicornis, new species

Rusty reddish, the abdomen brown or blackish on apical half and with strong violaceous reflections; wings with quadrate brown spot in the middle anteriorly. Length, 10 to 11.5 mm.

MALE.—Front, face, cheeks and lower occiput reddish yellow, and with reddish-yellow pile. Frontal triangle small, convex in front. Verti-

cal triangle brown, black pilose. Occiput blackish, with yellow-brown pollen and yellow pile. Face prominent below, produced downward only moderately, deeply concave above, the tubercle moderately large; depression cinereous pollinose. Antennae orange, the arista with long black hairs and apex; third segment very slightly tapering, the apex oblique and gently convex. Eyes with cinereous pile.

Thorax rusty reddish, the mesonotum except laterally, and the pectus somewhat darkened, the mesonotum with violaceous reflections. Pile black, the front of the mesonotum laterally and the propleura yellow pilose, the mesonotum with yellow pile intermixed on the disc, except posteriorly. Scutellum with violaceous reflections, the hair wholly black.

Legs reddish, the tibiae, base of hind femora and the apical tarsal segments brownish. Hair black.

Wings rather brownish on the apical half except just beyond the dark brown quadrate spot; costal cell and base of the first basal also darkened. Marginal cell petiolate. Squamae reddish yellow, with brown fringe. Halteres with white knob.

Abdomen brownish to blackish beyond the middle of the second segment, and with strong violaceous reflections, the base reddish or reddish yellow. Pile black, whitish on the first segment and the basal third or less of the second. Venter yellowish on the basal half, blackish apically, the pile pale yellow on the basal three sternites. Genitalia brownish red, with black hair.

FEMALE.—Front reddish; ocellar triangle brown; pile tawny, black at the vertex. Pleura mostly yellow pilose, the mesonotum with much more yellowish pile except posteriorly. Second abdominal segment pale yellowish pilose on more than the basal half, the pale pile reaching the sides; fifth segment black-haired.

TYPES.—Holotype, male, Tumatumari, British Guiana, July 12, 1911 (F. E. Lutz). Allotype, female, Kamakusa, British Guiana (H. Lang).

Volucella pachecoi, new species

Black with yellow markings; face without blackish vitta; wings partly brownish. Length, 7.5 to 8.5 mm.

FEMALE.—Face and front pale yellow, the ocellar triangle black; front with pale pile, a black band above and more or less numerous black hairs along the middle, the lateral depressions wide but not deep. Occiput black, cinereous pollinose and pale yellowish pilose. Cheeks brown, black pilose above, separated from the face by a broad black stripe which is bordered behind by a narrower yellow vitta. Face yellow pilose, with some black hairs on the tubercle, strongly produced downward, slightly receding below the tubercle, gently concave above, the tubercle moderately large and prominent. Antennae brown, the arista with long black rays and apex. Eyes black pilose.

Thorax shining black; a spot above the front coxae, the sides of the mesonotum in front of the suture, a short, supra-alar vitta and a pair of confluent spots in front of the scutellum yellow; posterior calli, and sometimes a large oval spot on the mesopleura, reddish. Pile yellow, a broad band of black hair behind the suture, but it scarcely reaches the lateral margins. Scutellum yellow, black pilose on more than the apical half, yellow pilose basally.

Legs black, the knees narrowly reddish; basal two tarsal segments yellow. Pile black, yellow on the posterior coxae, the pale tarsal segments and on most of the posterior femora.

Wings cinereous hyaline and brownish as in *circumscripta* but lacking the darker spot at the apex of the marginal cell and with a pale spot beyond this point. Marginal cell bulbous apically. Squamae yellowish and with yellow fringe. Knob of halteres white.

Abdomen shining black. Second segment with a pair of moderately separated yellow spots that extend to the posterior fourth medianly and are strongly narrowed and curved back toward the lateral margins, which they do not nearly reach. Third segment with the narrow base, sometimes broadly interrupted in the middle and not nearly reaching the lateral margins, yellow and with a broadly interrupted narrow median fascia that is broadened inwardly so that it connects with the anterior fascia more or less broadly, and is dilated outwardly but does not connect with the anterior fascia, thus leaving a roundish black spot that is connected more or less broadly to the black of the sides. The apex of the third and fourth segments may be more or less obscure reddish and there may be similarly colored basal triangles toward the sides of the fourth segment. Pile mostly whitish, yellowish basally; third segment with a large rectangle of black pile on each side of the disc and the posterior angles black pilose; second segment with the sides black-haired on more than the posterior half, the black pile continued broadly inward on the middle of the segment and curving back to form a more or less complete fascia along the hind margin. Venter black, the second sternite and more than the basal half of the third reddish yellow except on the broad sides; pile pale yellow, black on most of the fourth sternite, on the broad apex of the third and on the fifth.

TYPES.—Holotype, female, and paratype, female, Guatemala (M. Pacheco).

Volucella circumscripta, new species

Black, with reddish and yellowish markings; face with median brown vitta; marginal cell bulbous apically; wings with brown markings. Length, 8.5 mm.

FEMALE.—Front brown, the sides very broadly yellow on the lower two-thirds, the middle gently convex; pile black, yellow laterally except above. Occiput black, cinereous pollinose, whitish pilose. Cheeks brown, sepa-

rated by a broad yellow stripe from the broad black stripe separating face and cheeks. Face yellow, strongly produced downward, with a median brown vitta, very gently concave above, the small tubercle situated below the middle. Antennae brownish, the third segment reddish below toward the base; arista with long black rays above and short ones below. Eyes black pilose.

Thorax black, a spot above the front coxae, a broad stripe extending over the humeri and notopleura, a supra-alar vitta and a subquadrate prescutellar spot yellow; posterior calli and a large oval spot on the mesopleura, reddish. Pile yellow, with a broad band of black crossing the posterior fourth of the mesonotum and some black hairs on the upper part of the pteropleura. Scutellum reddish yellow, black pilose, the base and free border with yellow pile except on the narrow apex.

Legs black; knees narrowly reddish; basal three tarsal segments yellow. Pile black, yellow on the posterior coxae, the basal fourth of their femora and on the pale tarsal segments.

Wings cinereous hyaline, the apical third brownish, with a darker spot at the apex of the marginal cell; near the middle with a brown stripe extending from the origin of the third vein over the crossveins and beyond this a broader stripe extending from the base of the stigma over the anterior crossvein. Squamae grayish, with pale yellow fringe. Knob of halteres white.

Abdomen shining black; second segment with a pair of large, lunulate reddish spots resting on the base, broadly separated from each other and from the lateral margins, their inner ends much broadened, the outer ends narrowing and curving back to the middle of the segment. Third segment with the base rather narrowly reddish and with a median, broadly interrupted reddish fascia that does not nearly reach the lateral margins. Pile whitish and very pale yellow, the second and third segments with almost the apical half black pilose on their full width and on the apical three-fourths of the median two-thirds except for a whitish triangle extending forward from the posterior margin on the third segment. Venter black, the second sternite reddish except on the broad sides, the third reddish on the basal half except laterally; pile pale yellowish, black on the apex of the third and on the following sternites.

MALE.—Frontal triangle brown, the upper border black. Thorax black pilose, the mesonotum with yellow pile intermixed in front of the suture and with a prescutellar yellow band; scutellum with the entire free margin yellow pilose. Posterior femora with pale pile only anteriorly near the base. The abdomen in the single specimen is not fully colored, being ferruginous with black sides; the pile on the basal segments is the same as in the female but the fourth segment bears black pile on the basal half except in the middle. Genitalia black, black pilose.

HOLOTYPE.—Female, São Paulo, Brazil, and allotype, male, São Paulo (Count A. A. Barbiellini), received from Dr. C. L. Fluke.

Volucella dimorphia, new species

Black, with yellowish markings; wings with brown pattern; face without blackish vitta. Length, 7 to 8 mm.

MALE.—Face and front pale yellow, and yellow pilose. Vertical triangle shining black, with long black pile. Occiput cinereous pollinose and yellow pilose. Cheeks brown, with black hair, separated from the face by a very broad black stripe. Face strongly produced downward, slightly concave above, perpendicular below the moderately prominent tubercle. Antennae brown, the third segment somewhat constricted in the middle, obtuse apically; arista reddish, with long black rays above and short ones below. Eyes with thick black pile.

Thorax shining black, the notopleura and usually a large spot on the upper part of the mesopleura reddish; before the scutellum usually with a pair of very broadly separated, very small reddish or yellow spots; notopleura sometimes partly yellow and there may be a reddish spot above the front coxae. Pile black, intermixed with yellow in front of the suture, and all yellow behind the humeri and on a narrow prescutellar band. Scutellum yellowish, with black pile on the apex and sides and yellow pile on the basal fourth.

Legs black, the bases of the posterior femora and the tarsi yellow, the apical tarsal segments, first segment of the posterior pair and the bases of the anterior four femora, reddish. Pile black, yellowish on the tarsi and on the broad base and anterodorsal surface of the posterior femora.

Wings hyaline, the apical third or more brownish but paler apically and posteriorly, the usual two median crossbands united to form a single irregular spot. Marginal cell bulbous apically. Squamae blackish. Halteres yellow.

Abdomen shining black, the first segment brown or reddish. Second segment usually with a large, obscure reddish-yellow spot toward each side that may be more or less distinctly produced inwardly along the anterior margin. Third segment with a large reddish or yellowish spot near the lateral third that is produced obliquely forward and continues along the base of the segment but does not reach the lateral margins. Pile black, whitish on the first segment and on the basal half of the second except laterally, yellowish on the fourth segment except on the sides and large, transverse basal triangles. Venter black, the second sternite and broad base of the third reddish yellow except laterally, the pile black, pale on the middle of the second sternite. Genitalia rather brownish, with black hair.

FEMALE.—Front yellow, the ocellar triangle black; pile long, pale yellow, black on the ocellar triangle and vertex; cheeks usually with a yellow stripe in front. Thorax with yellow spots as follows: one above the front coxae, a broad stripe extending over the humeri and notopleura,

a supra-alar stripe extending forward from the reddish posterior calli and a pair of contiguous spots in front of the scutellum. Pile of the mesopleura and mesonotum yellow; a broad band of black pile behind the roots of the wings, mixed with yellow laterally, erect in the middle. Scutellum with almost the whole basal half yellow pilose. First abdominal segment yellow to brownish red, the second yellow on the basal half or more except on the sides; third all black or with markings as in the male. Fourth abdominal segment and apex of the third yellow pilose, the third sternite usually broadly pale pilose basally.

TYPES.—Holotype, male, and allotype, female, Nova Teutonia, Brazil, November 16 and 3, 1936. Paratypes, two males and two females, Nova Teutonia, February 7, 9, September 2 and November 13, 1936 (Fritz Plaumann), received from Dr. C. L. Fluke.

Volucella selecta, new species

Black or brown the base of the abdomen broadly pale; face with brown vitta; wings strongly tinged with brown; no prescutellars. Length, 7.5 to 9 mm.

MALE.—Face, front, cheeks and lower occiput greenish to reddish yellow; yellowish pilose. Frontal triangle small, convex in front. Vertical triangle black, black pilose. Occiput black, cinereous pollinose along the orbits except above, white pilose. Cheeks and face separated by a broad black stripe. Face moderately produced downward, with a rather narrow median vitta, deeply concave above, the tubercle of medium size and prominent, slightly produced below the tubercle. Antennae orange, the arista with long black rays above and below; third segment broad basally, gently tapering to the obtusely rounded apex. Eyes black pilose.

Thorax shining black or brown, the upper half of the pleura and the broad sides of the mesonotum greenish or reddish yellow; posterior border of the mesonotum narrowly pale laterally, broadly pale in front of the middle of the scutellum; a brown vitta above the roots of the wings. Pile reddish yellow, mixed with black on the mesonotum, the black hair predominating posteriorly and laterally. Scutellum greenish or reddish, becoming black apically on the disc; pile black, the ventral fringe and a basal band yellow.

Legs black, the tips of the femora, bases of the tibiae and more or less of the first tarsal segment reddish. Pile black.

Wings strongly tinged with brown on the apical half or more; marginal cell open or closed. Squamae blackish. Knob of halteres white.

Abdomen black or brown; first segment and basal two-thirds of the second reddish yellow or green; third segment with a broad, posteriorly arched band of green to reddish beginning inside the basal angles and reaching the apical fifth in the middle, the band somewhat variable in width but always widest laterally; fourth segment with a rather similar band but this is less arched, narrows laterally where it reaches the basal corners of the segment and extends back at most to the apical third of the segment in the middle. Pile black, yellow on the broad base of the abdomen. Venter greenish or reddish, the apical half black. Pile yellowish basally, black apically. Genitalia reddish, black-haired.

FEMALE.—Front greenish, the ocellar triangle and an obscure spot in the middle of the lower third, brown, the lateral depressions broad, flattened; pile black, yellowish on the depressions. Mesonotum with shorter and more extensively yellow pile. The pale fasciae on the third and fourth abdominal segments are broader and bear whitish pile, best seen from posterior view.

TYPES.—Seven specimens from Nova Teutonia, Brazil: holotype, male, June 1, 1936; allotype, female, August 20, 1936; paratypes, five males, July 1, September 2 and October 2, 1936, all collected by Fritz Plaumann and forwarded by Dr. C. L. Fluke.

Volucella gertschi, new species

Brown or blackish, the base of the abdomen and sides of the thorax pale; wings strongly tinged with brown on the apical third; face with median blackish vitta. Length, 7.5 to 8 mm.

MALE.—Face, cheeks, lower occiput and frontal triangle greenish or reddish yellow, and with yellow pile. Frontal triangle small, usually with a broad brownish median vitta and black above. Vertical triangle shining black, black pilose. Occiput black, cinereous white pollinose and whitish pilose. Face produced moderately downward, deeply concave above, perpendicular or slightly receding below the rather large, prominent tubercle; face and cheeks separated by a broad black stripe; median facial vitta extending to the antennae. Antennae orange, the arista with long black rays above and below; third segment moderately wide, gently tapering to the obtusely rounded apex. Eyes brown pilose.

Thorax black or brown, the upper half of the pleura and the broad sides of the mesonotum greenish to yellowish; disc of mesonotum with strong greenish opalescence. Pile yellowish, intermixed with black on the dorsum, the black hairs predominating posteriorly. Scutellum pale greenish yellow on the border, brownish or blackish above but becoming paler basally, with strong violaceous or greenish opalescence; hair black except on the base and the ventral fringe.

Legs black, the knees and basal tarsal segment reddish; pile black.

Wings tinged with brown, paler on the basal half or more, the crossveins at the middle of the wing narrowly bordered with brown. Marginal cell open or closed. Squamae pale brownish with broad black border and fringe. Halteres with yellow or whitish knob.

Abdomen black or brown, the first segment and almost the basal three-fourths of the second

yellowish or pale greenish. Third segment without reddish band but with a paler, brownish or brownish red band poorly indicated: the band begins at the basal corner of the segment and curves back so that at its middle its posterior edge is at the posterior third of the segment. Fourth segment with a rather similar band on the anterior half. In some cases the paler bands are very diffuse and scarcely discernible, in others fairly sharply limited. Pile black, yellowish on the first segment and the pale portion of the second. Venter greenish or yellowish to the middle of the third sternite, thence black to the apex, the pile following the ground color, yellowish basally. Genitalia black, black pilose.

FEMALE.—Front shining black, the anterior angles greenish; pile black, yellow along the orbits; depressions of moderate width, fairly deep; front concave in the middle in profile. Mesonotum with only pale pile. The pale bands on the third and fourth abdominal segments are well marked and are clothed with whitish pile.

TYPES.—Holotype, male, and three paratypes, males, El Volcan, Chiriqui, Panama, February 17, 1936 (W. J. Gertsch and F. E. Lutz). Allotype, female, Moca Guatalon, Guatemala, March–April, 1931 (J. Bequaert).

Like the related species this form has the pale parts quite greenish in life and in freshly killed specimens. In due time the greenish color disappears leaving a yellowish or reddish ground. This reddish or yellowish condition may sometimes be found in living specimens that have flown for a considerable time.

Volucella albifrons, new species

Blackish with violaceous reflections, the base of the abdomen broadly yellow; wings tinged with brown on apical half. Length, 7.5 to 9 mm.

MALE.—Face and cheeks reddish, the upper half of the face and the frontal triangle yellow, in some lights whitish; pile yellow. Frontal triangle small, not convex, with a few black hairs above. Vertical triangle black, black pilose. Occiput black, with cinereous pollen and white pile. Face only slightly produced downward, deeply concave above, perpendicular below the large, prominent tubercle. Antennae orange, the arista with long black hairs above and below; third segment short, broad, tapering on the apical half. Eyes with brown pile which becomes tawny below.

Thorax blackish, the upper half of the pleura and rather narrow sides of the mesonotum reddish yellow, the dorsum with strong violaceous reflections. The yellow sides of the mesonotum are quite narrow above the roots of the wings and cover only the posterior calli behind. Pile yellow, mixed with longer black hairs on the dorsum, the black predominating posteriorly and laterally. Scutellum blackish, violaceous, with narrow reddish base and yellow free border, a few hairs basally and the ventral fringe yellow.

Legs wholly black and with black pile.

Wings tinged with brown on the apical half or less, the crossveins at the middle narrowly bordered with brown. Marginal cell open or closed. Squamae blackish. Knob of halteres white.

Abdomen black, the first segment and basal two-thirds of the second yellowish. Second segment with large, oblique, reddish spots toward either side in front which may be broadly united across the posterior half of the segment where it may rather closely approach the posterior margin. Fourth segment with similarly arched fascia but it tapers laterally, is of more uniform width and does not extend behind the posterior fourth of the segment. Pile black, yellow on the yellow areas. Venter yellowish on the basal half, black apically, yellow pilose basally, black apically. Genitalia brown with black hair.

FEMALE.—Front black, the anterior angles, and sometimes the narrow anterior margin, yellow; pile black, mixed with tawny anteriorly; lateral depressions wide, the middle of the front concave in profile. Mesonotum with shorter pile, the yellow pile more conspicuous and more abundant, the scutellum with pale and black hairs intermixed. Second abdominal segment more narrowly yellow, the black extending strongly forward toward the sides, reddish fascia on fourth segment with some cinereous pile but it is not easily seen.

TYPES.—Holotype, male, allotype, female, and two paratypes, females, Nova Teutonia, Brazil, October 20, 1936 (Fritz Plaumann), received from Dr. C. L. Fluke.

A second male may be the same species but it has a much smaller facial tubercle and slightly shorter face. This is the specimen with well-marked bands on the third and fourth abdominal segments. In the females the reddish fasciae are not broad and that on the third segment is complete in only one specimen.

Volucella latevittata, new species

Blackish, yellow and reddish, the mesonotum strongly violaceous or bluish; wings weakly to strongly brownish on the apical third. Length, 6 to 7.5 mm.

MALE.—Face and cheeks whitish or very pale yellowish, separated by a very broad black stripe, the facial vitta very broad and reaching the base of the antennae; pile pale yellow or whitish. Frontal triangle small, flattened; vertical triangle black, with long black hair. Occiput black, the orbits whitish pollinose and pilose. Face produced but little downward, somewhat prominent below, deeply concave above, perpendicular or slightly produced below, the tubercle moderately large. Antennae pale orange, the arista with long black rays.

Thorax brown or blackish, the pleura whitish

or yellowish on the upper half, the sides of the mesonotum moderately broadly yellow, the disc strongly violaceous or bluish. Pile yellow, the mesonotum with some longer black hairs posteriorly. Scutellum brown or black with violet or bluish reflections, the border narrowly yellow, the pile yellow, black on the sides, the bristles black.

Legs brown or black, black pilose.

Wings hyaline with about the apical third and narrow clouds along the crossveins at the middle of the wing weakly to strongly brownish; marginal cell open or closed. Squamae brownish gray, with brown border and fringe. Knob of halteres white.

Abdomen brown or black, the first segment and the basal two-thirds or less of the second pale yellowish. Third segment with a broad, posteriorly arched reddish band extending from inside the lateral angles in front and reaching the posterior fifth of the segment in the middle. Fourth segment with a similarly arched band but it is of almost uniform width, reaches only to about the posterior third of the segment, its width slightly less than one-third the length of the segment. Pile black, whitish on the pale base and on the reddish fascia on the fourth segment. Venter with the two basal sternites, broad base of the third and incisure between the third and fourth, yellowish to reddish, the apical sternites dark reddish to black, the pile all pale yellowish.

FEMALE.—Front shining black, the anterior border more or less reddish, the large anterior angles yellow; lateral depressions deeply limited inwardly, the front concave in profile; pile short and black, pale on the anterior pale areas. Reddish band on the third abdominal segment broadly interrupted in the middle, but probably variable.

TYPES.—Holotype, male, between Queremal and Buenaventura, Colombia, February 3, 1935 (Severo Quintero). Allotype, female, Peru, January 1, 1904. Paratypes: male, Mapiri, Bolivia, March 21, 1903; female, Peru, December 28, 1903.